REMARKS

Claims 1, 2, 4-8 and 10-16 are pending in this application. Claims 1, 2, 4-8 and 10-16 are amended herein for clarity to more particularly define the invention. New claims 17-20 are added herein. Support for these amendments and new claims is found in the language of the original claims and throughout the specification and it is believed that no new matter is added by these amendments or new claims. Applicants respectfully request entry of these amendments and new claims and examination of the pending claims on the merits.

RESPONSE TO RESTRICTION REQUIREMENT

The Office Action states that the application contains the following groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Group I, claims 1, 11 and 15, drawn to a method for detecting a non-A-G hepatitis virus in a sample with an antibody.

Group II, claim 2, drawn to a human hepatocyte cell line.

Group III and IV, claims 4, 5 and 14, drawn to a nucleic acid vaccine comprising a nucleotide sequence.

Group IV, claims 6 and 13, drawn to a polypeptide vaccine.

Group V, claim 7, drawn to an antibody.

Group VI, claims 8, 10 and 16, drawn to a method for the detection of hepatitis Y virus with a nucleotide sequence.

Group VII, claim 10, drawn to a method for detecting hepatitis Y virus with a polypeptide.

Group VIII, claim 12, drawn to a method for growing hepatitis Y virus.

Applicants note that the Office Action recites "Group III and Group IV," listing claims 4, 5, and 14, as well as "Group IV," listing claims 6 and 13. Applicants assume that this is an inadvertent typographical error and for the purposes of this response, applicants interpret Group III to include claims 4, 5 and 14 and Group IV to include claims 6 and 13.

Applicants provisionally elect Group III (claims 4, 5, and 14) with traverse. The traversal is on the basis that the Examiner has not demonstrated that the claims do not relate to a single general inventive concept under PCT Rule 13.1.

In particular, the Examiner alleges that the claims lack the same or corresponding technical features as required under PCT Rule 13.2 on the basis that the Examiner interprets the common technical feature to be a method of detecting a non-A-G hepatitis virus in a sample. The Examiner supports the contention that the claims do not meet the requirements of PCT Rule 13.2 by citing Shieh et al. and Zhang et al, which are described by the Examiner as disclosing a method of detecting a non-A-G hepatitis virus.

As a first issue, applicants respectfully point out that a non-A-G hepatitis virus is described in the instant specification to be a hepatitis virus that is not any of the hepatitis viruses A, B, C, D, E, or G (see, for example, page 10, line 22; page 11, lines 1-4). Shieh et al. describes the detection of hepatitis B virus and Zhang et al. discloses the detection of hepatitis C virus and therefore, neither of these references disclose a method for detecting a non-A-G hepatitis virus in a sample.

Furthermore, the common technical feature of the claimed invention is actually the discovery of a new, previously undescribed hepatitis virus, hepatitis Y, and claims are presented that are directed to nucleic acids, polypeptides and antibodies specific for hepatitis Y virus, as well methods of detection, diagnosis, and growth of hepatitis Y virus, using the claimed nucleic acids, polypeptides

and antibodies. Neither Shieh et al. nor Zhang et al. disclose a hepatitis Y virus or any method of detecting, diagnosing or growing the claimed virus. Thus, the claims clearly have a common technical feature that is a contribution over the art and therefore have unity of invention and should be examined together as one invention.

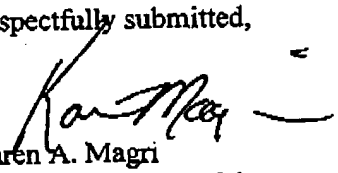
As an additional point, applicants point out that in the corresponding international application, PCT/EP99/10179, no unity of invention issue was raised regarding the subject matter of claims 4-14 pending in the international application, all of which were directed to hepatitis Y virus nucleic acids, polypeptides, antibodies and methods of detection and diagnosis, as well as methods of growth and vaccines. Thus, applicants respectfully request that this restriction be withdrawn and that all of the pending claims of the present U.S. application be searched and examined together.

Applicants also note that the Office Action states that if claims from Groups IV, VI or VII are elected, that a species election is also required. As applicants have elected Group III, no species election is required. However to the extent that the pending claims recite nucleic acids, applicants respectfully note that election of a single species of nucleic acid would be prejudicial to the applicants and would place an unnecessary burden on them. Specifically, applicants wish to draw the Examiner's attention to MPEP §2434, entitled "Examination of Patent Applications Claiming Large Numbers of Nucleotide Sequences." This section states in relevant part that "...the Commissioner has partially waived the requirements of 37 CFR 1.141 and will permit a reasonable number of such nucleotide sequences to be claimed in a single application. Under this policy, in most cases, up to 10 independent and distinct nucleotide sequences will be examined in a single application without restriction." Furthermore, in MPEP § 803.04, it is stated in relevant part that "...to further aid the biotechnology industry in protecting its intellectual property without creating an undue burden on the Office, the Commissioner has decided *sua sponte* to partially waive the requirements of 37 CFR 1.141 *et seq.* and permit a reasonable number of nucleotide sequences to be claimed in a single application." This section then goes on to state that "[i]t has been determined that normally ten sequences constitute a reasonable number for examination purposes."

Thus, applicants request that all of the nucleotide sequences recited in the claims as presented herein be examined together in a single application, as the number of nucleotide sequences in the enclosed claim set does not exceed ten and is thus determined to be a reasonable amount to be examined together.

No fee is believed due with this response. However, the Commissioner is hereby authorized to charge any deficiency associated with this correspondence or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,



Karen A. Magri
Registration No. 41,965

USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec, P.A.
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: (919) 854-1400
Facsimile: (919) 854-1401

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being submitted by facsimile transmission to 571-273-8300, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on August 22, 2005.

Katie A. Chung